

Calculation of animal unit months (AUM) use on California's forests and rangelands, 1997

An estimate of AUM use was made using cattle inventory statistics from the 1997 Census of Agriculture and AUM estimated for each type of cattle as interpreted by Dr. M. George of UCD on 5/2.

AUM assumptions by cattle type:

Cows = 1 AUM

Heifer calf = .5 AUM

Heifer = 1 AUM

Bull calves = .5 AUM

Heifer not breeding age = 1 AUM

Steers (stocker cattle) = .7 AUM

Cattle Inventory, 1997

Cattle Type	Number of head
Cow/Heifer Calved (Reproducing Cows)	707,000 ¹
Heifer/Heifer Calves, Female not reproducing and Females not of reproducing age+ 1year	529,000 ²
Steers/Bullcalves/Calves, Male, not reproducing	636,000 ³
Bulls	1 per 20 cows

Source: NASS, 2001

Inventory notes:

- 90% reproduction rate of which half are male and female
 $707 \times .9 \times .5 = 318,000$ new heifers
 $707 \times .9 \times .5 = 318,000$ new bulls
- 20% heifer replacement rate
 $.2 \times 529,00 = 106,000$
 $529,000$ heifers – $106,000$ replacements = $323,000$
- 50% of steers, bull calves and calves are stockers brought in
 $.5 \times 636,000 = 318,000$ stockers
new bulls = $318,000$

AUM Calculation

Cattle type	Formula	Annual AUMs used
Breeding cows	$707,000 \text{ head} \times 1 \text{ AUM/head} \times 12 \text{ months} =$	8,484,000
Replacement heifer/heifer calves	$106,000 \text{ head} \times 1 \text{ AUM/head} \times 12 \text{ months} =$	1,272,000
Stockers	$318,000 \text{ head} \times .7 \text{ AUM/head} \times 7 \text{ months} =$	1,558,200
Bulls	$35,300 \text{ head} \times 12 \text{ months} \times 1.2 \text{ AUM/head} =$	508,320
Total Annual AUM Use		11,822,520